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ABSTRACT

A number of claims made by Bereiter and Engelmann, two of the strongest proponents of the verbal-deprivation hypothesis, are examined in light of data gathered during a longitudinal study of two children acquiring Black English Vernacular. The "giant-word syndrome" and its proposed concomitants of absence of developmental stages, deviant imitation, and confusion about homonym use are rejected on the basis of evidence from these children, who are members of the same speech community as the Bereiter-Engelmann subjects. It is suggested that different discourse constraints, not linguistic deficit, are the source of the Eereiter-Engelmann findings. The problems inherent in the Bereiter-Engelmann language program, which is based on a behavioristic model, are briefly discussed. Instruction such as that advocated may be beneficial for the limited number of children involved because it teaches them the school-honored dialect, but the overall effect is to augment the antipathy that already exists toward stigmatized varieties and to increase the difficulties that their speakers have in adjusting to the school culture. (Author)

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Technica? Report No. 82

BEREITER AND ENGELMANN RECONSIDERED: THE EVIDENCE FROM CHILDREN ACQUIRING BLACK ENGLISH VERNACULAR

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Bereiter and Engelmann Reconsidered: The Evidence from Children Acquiring Black English Vernacular

Introduction

In the 1960's, when concern about the inadequate school performance of children in the inner city was particularly high, there was a plethora of articles documenting their supposedly inadequate language, as well as a number of programs directed to language remediation. Many educators correctly claimed that language behavior in lower-class homes was quite different from that assumed and demanded by the schools, but they also made a number of highly speculative inferences about the linguistic competence of lower-class children, and the adequacy of the language itself. For example, Martin Deutsch (1967) attributed Bernstein's restricted code to "urban migrants marked by caste factors" and claimed:

It is characterized by grammatically simple and often unfinished sentences, poor syntactic form, simple and repetitive use of conjunctions, the inability to hold a formal topic through speech sequences, a rigid and limited use of adjectives and adverbs, etc. (p. 222)

Rule-governed features of non-standard dialects, such as variable subject-verb agreement or absence of the auxiliary, were labeled errors (Whipple, 1967). These hypothetical language deficiencies were then presented as the cause of an impoverishment in "such language-related knowledge as the number concepts, self-identity information, and understanding of the physical, geometric, and geographical environments" (Ausubel, 1967, p. 252; Silverman, 1965, p. 70).

By far, the most vigorous denunciation of lower-class language and the most specific remedies were presented in Carl Bereiter and Siegfried Engelmann's (1966) book, <u>Teaching Disadvantaged Children in the Preschool</u>. While there have been a number of reviews of their classroom procedures (Lane, 1967; Mattick, 1967) and there has been a spate of theoretical objections from linguists to their claims about the language of the children they call culturally-deprived, many educators appear to accept Bereiter and Engelmann's characterizations of non-standard speech.

Subjects and Methods

The data were gathered during a longitudinal acquisition study of two children acquiring Black English Vernacular (BEV). At the beginning of the research period, Marshall was 17 months, 2 weeks (17.2) and Jackson was 20 months (20). They were 26 months, 1 week (26.1) and 26 months, 2 weeks (26.2) respectively at the conclusion.

Data were collected using a Sony TC-126 stereo recorder. On one channel, the child's verbalization and all conversation were recorded; on the other, the context of the verbalization was described. In this way, it was possible to note in relatively fine detail significant gestures and changes in attention patterns during a single verbalization, as well as information about objects and people with whom the child was interacting.

Since Marshall was from the same black population as the Bereiter-Engelmann subjects and Jackson was from a nearby town where essentially the same dialect was spoken, the data collected have direct application to the Bereiter-Engelmann claims.

Discussion of the Verbal Deprivation Hypothesis

In their discussion of the language of their subjects, one of Bereiter and Engelmann's major constructs is the "giant-word syndrome." They claim that the culturally-deprived child does not segment the stream of speech into word-size units but rather processes it, at the sentence level, as an unanalyzable chunk of information. These "giant words" are not the result of a receptive problem of the listener's caused by faulty articulation (or, from a linguistic point of view, a different phonological system). Rather, the claim is that the "giant-word syndrome" is the source of this deviant pronunciation and they propose "... the reader might take a try at EMPIANASROFLALILIMINLIAL, reading it aloud once and then trying to repeat it from memory" (Bereiter & Engelmann, 1966, p. 35) to test the force of their argument.

There are three corollaries that they present which would be expected if, in fact, developing speakers of BEV were unable to analyze speech. First, there would not be the usual progression of developmental stages, beginning with a one-word level and advancing to the rule-governed complexity of adult speech. Second, imitation in emerging speech would be deviant, with recency effect being the determining factor. Third, they claim to have found a high production of homophones and a resulting

"stammering behavior" caused by confusion about the number of identical forms to insert in a given sentence.

Bereiter and Engelmann (1966) contrast the development of transitive sentences in the speech of culturally-privileged and culturally-deprived children:

... the culturally privileged child builds up his sentences by adding words to them as he masters them: from 'Mommy read' to 'Mommy read book' to 'Mommy read me book' and eventually to 'Mommy, I want you to read me this book.' The culturally deprived child grappling with such a sentence would probably start off with an amalgam like 're-ih-bu,' with which he would then be stuck. The words 'me' and 'this' would be lost in noise, as they would be in any other sentence where they occurred, and thus it would be difficult for them to emerge as distinct, usable words. (p. 36)

It is difficult to discover what sort of evidence this claim is based on since Bereiter and Engelmann were working with four-year-olds and the intensive research that has been conducted in language acquisition over the last ten years shows that these aspects of development are largely complete by that age. If younger children acquiring BEV are studied longitudinally, exactly the same sort of developmental stages are found that have been described for such highly unrelated languages as English (Brown, 1973). Finnish (Bowerman, 1973), and Samoan (Kernan, 1969), to name just a few. At the earliest stages of the present study, Marshall (17.3)

was producing verb-object structures. (Give spoon.)³ Six weeks later (19.1), grammatical subjects had appeared in his speech (I see block. I want some.), as well as catenative verbs (I want to see it.). During this period, Jackson (20.2) began using possessive pronouns (I want my mommy.).

By 22 months, Marshall had expanded his repertoire of transitive sentences to include locative prepositional phrases (I want some in here.), while Jackson was incorporating indirect objects (Give meat dolly.).

During this stage, Jackson produced one highly complex sentence, I want Lorrayne bottle. On the basis of his actions, Lorrayne bottle was not a possessive structure but an embedded sentence of the form subject-object, the closest adult equivalent being, I want Lorrayne to have the bottle.

This structure has been reported by Bloom (1970) and, in Jackson's speech, represents an earlier stage repeated in this complex sentence.

As the children develop, their sentences become progressively longer and syntactically more complex through the addition of structural categories, the use of inflectional endings, and the ongoing growth of the lexicon. By the final session, in many cases only the infinitive marker to or the definite article was needed to make their sentences well-formed by the rules of either Standard English or BEV. (I want put that on there. I want go riding. I see bottle there.) There is an incremental growth as the child acquires concepts and masters forms which are closer to the mature form of BEV. Table 1 gives examples of the principal transitive structures to emerge during the research period.



Insert Table 1 about here

One structure which has been particularly identified as symptomatic of the inadequacy of the speech of this population is objective case subjects. Sentences like Me got juice have been identified as "a series of badly connected words or phrases" (Bereiter, Engelmann, Osborn, & Reidford, 1966, p. 114). At 22 months, Jackson was taped producing sentences of this form, Me want TV on. Tanz (1974) has argued that the objective case of pronouns (me, her, him, us, them) should be considered the more common or unmarked form because they occur in a variety of contexts (as direct object, indirect object, after prepositions, etc.), while the nominative forms (I, she, he, we, they) are the exceptions because they occur only in subject position. When children notice the high rate of occurrence of the objective form across environments, they may generalize these forms to subject position, regardless of the dialect they are learning. What is particularly interesting about this structure of Jackson's is that this form did not occur in the mature dialect. Therefore, this sentence is <u>not</u> evidence of either his acquiring the rules of BEV or the inherently defective status of the dialect. Rather, it is an indication that Jackson is forming the same rule-governed generalizations about the language as he progresses to mastery that children acquiring Standard English do.

Imitation in developing speech has been studied in considerable detail (cf. Brown & Fraser, 1964; Ervin, 1966). Basically, it has been shown that the child imitates those structures which he is producing



spontaneously or those that are incipient. At the early stages, when the child is producing one or two word utterances consisting of substantives, nouns and verbs are selected from sentences he hears and are repeated. Forms which are acquired relatively late, e.g., inflectional endings such as the -s of He sees, the ed of I wanted, or the -ing of He's singing, are not imitated. However, in discussing performance on the imitation task of the Cognitive Maturity Test, Bereiter and Engelmann (1966) state:

The severely disadvantaged child will tend to give merely an approximate rendition of the over-all sound profile of the sentence, often leaving out the sounds in the middle, as is common when people are trying to reproduce a meaningless series-this in spite of the fact that the words themselves are often very simple, like 'A big truck is not a little truck." (p. 35)

Longitudinal data do not support such a position. At the beginning of the research period, single substantives or demonstrative-substantive structures were echoed by the child. (Jackson, want to build a tower? > Tower.

This doll is yours. > This doll.) When the child began to produce locative structures, he began repeating them. (Is the puppet in there? > Puppet in there.) Inflections, auxiliary verbs and the copula were systematically omitted. (Is Lorrayne biting the baby? > Lorrayne bite baby. Peggy's shoes. > Peggy shoe.) By examining subsequent tapes, we can verify that when these endings are about to be mastered and produced spontaneously, they are imitated. (Look, it's still turning. > Turning.)

There is no violation of word boundaries. Given a bona fide amalgamation process, a sentence such as *Is Lorrayne biting the baby?* should occasionally be repeated as *Ing the baby?* Such a sentence was never uttered. Examples of imitative speech are given in Table 2.

Insert Table 2 about here

The last point about the giant-word syndrome to be discussed is the claim about homonyms. Bereiter and Engelmann (1966, p. 34) state that the final consonants of the words it, is, in, if are lost, and the child uses "the same sound for all of them--something on the order of 'ih.'"

They further claim that because of this identity, when the child is asked to repeat a sentence such as It is in the box, he produces a stammer because he is unsure of how many ih's to insert. By 26 months, neither Jackson nor Marshall was producing the cognitively complex conditional form if, as would be expected from studies of the acquisition of Standard English, and of the other three, only it and is were homophonous, being reduced to the sound /I/. In those instances where the nasal segment of in was omitted, the remaining vowel was nasalized, so the word was not identical with it or is.

Labov's (1969) intensive study of the verb to be not only documents its inherent variability in mature BEV but shows that this variation is rule-governed and can be predicted by the phonological and syntactic environment. In beginning speech, the sentence It is my coat might be produced as /I ma ko/ or /I I ma ko/, but never with more than two

occurrences of the /I/ sound. There was no confusion about the number of homonyms to be produced, anymore than there would be for speakers of Standard English in the case of the much more peculiar sentence, He read red books, but never blue or yellow ones.

The Bereiter-Engelmann Language Program

Throughout their book, Bereiter and Engelmann compare their "culturallydeprived" subjects to deaf children, and more specifically compare the speech of the former to the writing of the latter. 6 As Lenneberg's (1967) work shows, this comparison is a misguided one: they are comparing a behavior that is common to all normal members of the species--speech-to one that must be taught, which is never acquired in a large proportion of people, particularly in the case of non-literate societies, and which shows great individual differences in literate societies--writing. Furthermore, not only are they comparing a maturationally-controlled speciesspecific behavior to a learned one but, in the case of the deaf population, they are considering the performance of individuals who are physically handicapped in ways that make them much more comparable to a non-literate than a literate society. In effect Bereiter and Engelmann are equating the speech of BEV children with the writing of a non-literate population. Such a fallacious comparison can do nothing but create confusion, and in fact it is probably this sort of reasoning that impels Bereiter and Engelmann to structure their program to teach four-year-olds forms that are mastered by children of the same speech population long before they are two years of age.



A case in point is their identity statement, This is a ball. Demonstrative sentences were produced at a high frequency by both children during the period of research, in accordance with the rule of the dialect they were acquiring, i.e., the copula to be was often omitted. (That a cookie. That the suitcase. That my teddy bear.) As the immature BEV speech conforms more closely to the adult form, the copula occurs with increasing frequency in these environments. For two groups of New York City teenage boys studied intensively by Labov and his colleagues (1969), the figures for the occurrence of the copula is range from approximately 50% - 60% preceding a predicate adjective or locative to approximately 70% preceding a predicate nominal. Figures are higher for adults. The most the Bereiter-Engelmann program can accomplish is to increase the frequency from the lower BEV norm to the 100% norm for formal Standard English. In many cases, this gain can be only a small one, as Labov's figures show.

Because of their radical underestimation of what is normal performance for children acquiring a non-standard dialect, and because they are operating within the constraints of a behaviorist model, Bereiter and Engelmann often have their teachers presenting highly deviant sentences to their students. For example, in an effort to avoid deictic switching (e.g., the change of the first and second person pronouns or demonstrative adjectives as the conversation moves from speaker to hearer), they have the children echoing the teacher's identity statement using this, rather than producing the correct structure, that is a ball (Bereiter & Engelmann, 1966, p. 140). An even

more deviant structure violates the Standard English rules of inalienable possession. They suggest (Bereiter & Engelmann, 1966, p. 161): "After the children have mastered on, over, and under, freely introduce plurals, for example by placing two hands instead of one hand on the table. 'Where are the hands? ... The hands are on the table.'" These sentences would be perfectly acceptable if the teacher were using the dismembered hands of a mannequin, but they are totally unacceptable if she is referring to her own hands. This problem could have been avoided simply by using the appropriate pronoun since children in this population are well on the way to mastery of this alternation before twenty-four months, as the fillowing example shows:

(Adult) Jackson, would you get me my shoes?

(Child) Your shoes?

(Adult) Un huh.

There appears to be an implicit recognition that a stimulus-response model will not provide the mechanism for teaching this rather complex operation, and it is sometimes assumed to have occurred (Bereiter & Engelmann, 1966, p. 160): "After the initial demonstration, give the child practice in carrying out instructions; such as 'Put your hand on the table.' As soon as the children carry out the action, ask, 'Where is your hand?' (or 'Where is this hand?')."

Much later in the program, when instruction is focused on teaching the subject pronouns, the teacher is instructed to present the following "quick rules" (Bereiter & Engelmann, 1966, p. 191): "If it is a man

(or boy), it is a he. If it is a woman (or girl), it is a she. If it is not a he or she, it is an it." These odd sentences could have been avoided if the authors had not been constrained by their identity statement. ("If the person is a man, we use the word he.") Notice that they are swallowing an elephant while coughing at a gnat, i.e. they are embedding the identity statement in the much more complex conditional form, which would be far beyond their subjects' understanding if all their speech competence had been gleaned from their preschool learning program.

Teaching polar adjectives also provides special problems. The reader is referred Particularly to the tortuous presentation of before and after (Engelmann & Bereiter, 1966, pp. 154-156). In attempting to demonstrate the meaning of these two items, the dimensions of time and space are badly confounded. Likewise, in attempting to teach the concept tall, the teacher is advised (Bereiter & Engelmann, 1966):

Draw two figures on the board, one tall, the other short. Identify each. 'These are men.' Then give an operational definition of tallness, which is merely an extension of the definition for long. 'See how long this man stands. He starts at the ground and he keeps on going. This man is tall. Say it.' (p. 146)

The sentence, see how long this man stands, is acceptable in English, but only as a means of conveying the duration of the act of standing, not as a means of conveying the concept of height.

There are other problems which could be discussed, but these are sufficient to demonstrate the difficulties of using a behaviorist

model to teach the rudiments of language. In many cases, the fact that the students in the program are not badly confused by the instruction they receive is a measure of the high level of linguistic competence they already possess.

The Conflict of Discourse Constraints

Most of Bereiter and Engelmann's claims about the language of disadvantaged children are totally without support, in part because the relevant data could only have been collected from a population of children at least two years younger than those they were working with. However, there <u>is</u> a clear conflict between the discourse rules of BEV and Standard English, and this can result in behavior on the part of the BEV child which will bias even a sympathetic Standard English observer.

Ward (1971) has demonstrated that linguistic socialization in a low-income black community is different from that of a white middle-class community. For example, she found that adult questions were bona fide requests for information and that questions were not used "for facetious drill." Imperatives are the primary form of verbal manipulation used by adults; verbal strategems such as suggestions in the form of questions are rarely used. Adults do not view themselves as language instructors and do not expand the beginning speaker's early verbalizations into the appropriate adult equivalent. Rather, they expand their own utterances. The underlying assumption, according to Ward, is that young children do not have anything interesting to contribute to a conversation and, as a result, these children are not trained to initiate and monopolize

a conversation with an adult. However, learning drills <u>are</u> provided in the home, a fact ignored by many educators, but they are the responsibility of older children. It is these older siblings who teach many of the intellectual skills to the younger family members and fulfill many of the role functions that are the prerogatives of adults in white, middle-class homes (Ward, 1971).

The effect of linguistic socialization was dramatically demonstrated over the course of the present research. The linguistic behavior of Marshall and a sibling who was one year older were strikingly different. It was very difficult to get the older child, Floyd, to verbalize. He would not even respond to what were, from the researcher's point of view, bona fide information questions. His behavior reflects the fact that the relationships between the adult investigator and each of the children were not comparable. When Marshall was taped, interaction was at his eye level and a high proportion of the conversation involved the toys used during the taping session. Since this sort of behavior is not typical of adults in the BEV community, it is highly likely that Marshall viewed the investigator as a sibling, and his verbalizations were those which were appropriate for a participant in such a discourse. Floyd, on the other hand, was typically addressed while the investigator was standing, and both the topics and form of these verbalizations were those of a white middle-class adult speaking to a child. Floyd, it will be claimed, did not know what to make of this behavior, and chose silence as the only safe option. That both children were operating within BEV conversational constraints was supported by recorded examples of sounding, the ritual insults of the black street culture.

The sort of conversational constraint noted in Floyd's behavior is known to occur in testing situations and classroom settings. For example, Hurst and Jones (1967) found that asking lower-class black children-questions-about realia was completely ineffective in producing adequate samples of language. Although Bere ter and Engelmann do not describe how they collected their data, on the basis of the claims they make about the language of their subjects, it is reasonable to assume that they placed them in dyadic relationships in which verbalization would have violated cultural norms.

Conclusion |

If we are to realistically assess the language of children from different ethnic backgrounds and develop programs that will support their transition into a cultural environment rather different from that of their homes, we must either use naturalistic observation or structure the test situation to conform with the rules governing the child's communicative behavior. Unsubstantiated claims, such as those made by the proponents of a verbal-deprivation hypothesis, will only harm the population of children they are intended to help.

There have been a considerable number of studies directed to the effect of labeling and teacher expectancy on teacher judgments of students, teacher behavior toward students and student achievement. In their "meta-analysis" of forty-three such studies, Glass and Smith (1977) found a difference of .47 standard devation in teachers' judgments of the groups labeled "high" and "low," with a .93 difference in "rated intellectual"

education, particularly language remediation, have resulted in improved school performance, it can be partially related to this labeling/teacher expectancy effect. Children in a program such as that developed by Bereiter-Engelmann are rigorously tutored in the standard dialect. When these children enter the public school system, one of the principal criteria for labeling them disadvantaged, i.e., non-standard speech, has been removed. If the label and the resulting teacher expectancies are different, we would predict higher judgments of intellectual ability and social competence, more presentations of learning opportunities, less withdrawal behavior and a resulting effect in student achievement, especially in words and concepts learned and reading.

Second, besides developing some degree of competence in the preferred dialect, these children are also acquiring some familiarity with the conventions of middle-class discourse, e.g., they are learning to respond to questions even when it is clear that the interrogator knows the answer. Knowing the conversational rules that apply before they enter the schools is obviously of considerable value. If the child displays the substantive

knowledge he already possesses, there will be a reduced tendency on the teacher's part to misjudge his educational potential.

These two possible effects might suggest that objections to the claims about BEV and other non-standard dialects made by Bereiter and Engelmann are beside the point. However, this does not follow. Only a small proportion of preschool children who speak non-standard dialects are enrolled in programs rigorous enough to result in even minimal control of Standard English. For the vast majority who enter school without tutoring, an acceptance of the Bereiter-Engelmann claims would increase negative labeling, lower expectations and diminish achievement.

Furthermore, parents should have some control over the education of their children. If a language program will result in the child's acquiring an additional ability such as speaking the school-honored dialect, parents should be so informed. It is quite conceivable that some parents might be committed to a language program if they were told that their children did not possess adequate speech but would reject such a program if they knew that it was designed to teach their children the speech patterns of the group that has benefited most from social stratification.

In the final analysis, the educational ends do not justify any means. The linguistic competence of those children labeled "disadvantaged" should be assumed, and their parents should be apprised of the expected linguistic outcome of any intervention program. Only a less stigmatized view of non-standard dialects and a more cautious attitude to language intervention will provide a rational basis for making effective long-range educational decisions for these children.

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Footnotes

See also the comments by Beilin and Gotkin (1967, p. 289) about the "very limited language facility of the slum child."

²See particularly the second chapter of Bereiter and Engelmann, Cultural deprivation as language <u>deprivation</u>, pp. 22-45.

In some cases, the first person singular pronoun was present, but it was elided to the verb want, and there was no evidence that it was functioning as a separate morpheme.

⁴Contrary to the prediction made by Bereiter and Engelmann and quoted above, the children <u>did</u> identify and learn new lexical items when they were first presented in sentences. When a new word, such as frog, was presented in the environments, Let's put the frog over here, and That's a little frog (a clear violation of the second-order statements, This frog is little being the proper form), Marshall immediately produced the sequence, There frog. I want frog.

⁵Notice that for Bereiter and Engelmann, accurate imitation is a function of the relative difficulty of the words involved. Evidence shows, however, that complexity of structure, not of individual lexical items, is the primary determinant of success in imitation.

⁶See particularly pp. 30-32, 51, 127-128.

⁷In fact, children acquiring Standard English also omit the copula during this period of development, a fact suggesting that at least some of the "deficiencies" Bereiter and Engelmann are trying to remedy will disappear with time.



Table 1
Development of Transitive Sentences

	<u>Marshall</u>	I -	<u>Jackson</u>
-	M17.3		-
	Give spoon. Get it. I want it.		
	M19.1	II	J20.2
	· · · · · · · · · · · · · · · · · · ·		
	I see block. I want some.		See block. I want block.
	I want some. I want it on.		Want it on.
	I want see it. Wanna get shoe.		I want my mommy.
	<u>M20</u>		
	I want play those.	III	:
	<u>M22</u>		<u>J22.1</u>
	I want some - in here. I want it out. I want outside. ("to go out	siđe")	Do it on. ("Open purse") I want those nut. Me want TV on. Give meat dolly. I want Lorrayne bottle.
	****	IA	104 9
	<u>M24.1</u>		<u>J24.1</u>
•	I want more food. I want cheese some more. Let me see. I want to see. I want see dog.		I want another toy. I want that over there. I want there going. I did it again. Want it cook. ("cooked") Want go upstair. Lorrayne want baby.
		٧	
	<u>M26.1</u>		<u>J26.2</u>
	I got doll. I want go home. I want go riding. I want put that on there.		Want it on feet. I want it on. Want Lorrayne do. ("I want Lorrayne to do") Spin it right there. I see bottle there. Peter break it.

Table 2
Examples of Imitation

	Adult	<u>Child</u>
•	<u>Jackson</u>	
J20.2	Jackson, want to build a tower?	Tower.
J21	Is that a baby?	. A baby.
J21.3	It's Tammy's shoe?	. Tammy shoe.
J22.3	You want the cards?	Want card.
J23.2	Is the puppet in there?	Puppet in there.
J24.1	Are you brushing my hair for me?	Brush.
J26.2	Is Lor∵ayne biting the baby?	Lorrayne bite baby.
J26.2	Shall I put it on Peggy?	Put it on Peggy.
J26.2	Where are the doggy's ears?	Doggy ear.
	<u>Marshall</u>	
M17.2	This doll is yours.	This doll.
M18.2	This dolly is hot.	Hot.
M18.2	In the box.	In the box.
M19.1	Oh, you found the dolly.	Found the dolly.
M20.2	Peggy's shoes.	Peggy shoe.
M21	Here it goes	Here it go.
M21.1	Where did it go?	Where it go?
M22.1	There's a black dog.	There black dog.
M24.1	I can't spin it there.	[ə] can't spin.
M24.3	Look, it's still turning.	Turning.
M26.1	Where's dolly's finger?	Where dolly finger?

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